Minutes, 8/25/04 Tevatron BPM Upgrade Meeting
Stephen Wolbers

This set of minutes, and all future minutes, are or will be deposited in the Beams Document Database as document number 792.

The agenda as announced consisted of:

1. Report from Bob and Steve
2. Teststand/Echotek status
3. Report from Technical Coordinator -- Jim Steimel
4. AOB

1. Report from Bob and Steve.

- The beam is now off and we are in shutdown. Congratulations to everyone on the success of the A3 BPM measurements.

- Thursday we will have a discussion of the filter and timing boards.

- There are still purchases to be made, items to be received. Some status:

  - The filters will start to arrive the week of Sept 6.
  - The VME crates are arriving and are being checked out.
  - The cable requisition has been awarded. There is some feedback with the vendor on labels and that will occur over the next week or so.
  - Lots of small to medium sized requisitions for parts for the filter and timing boards are being signed and placed. Also procard orders for those components with long lead times.

- Given the timing of all the parts and pieces our schedule has slipped somewhat. We will be in the process of updating the schedule to reflect the known delivery of components and will likely overlap the installation/commissioning phases.

2. Teststand/Echotek board status -- Mark Bowden/Dehong Zhang

- Echotek believes there were 3 issues remaining on the boards.

- 2 of them are believed to be fixed. The single word read of ffff could not be duplicated by Echotek up to now. Echotek's suggestion is to send them a MVME board and the software we are using to test.

- 4 of the newest Echotek boards arrived on Friday August 20.

- Dehong has had some success and some non-successes testing the new boards. Direct VME access works. He used the 2nd version of the VME driver. The counting test worked.

- Problems have been encountered with larger data transfers. This seems to be related to problems with single word reads. Dehong has tried loading new firmware but that had the effect of freezing one board completely. Work continues.

- The transient problem that we saw in the prep tests has been acknowledged by Echotek. We believe that the new board with a proper set of setup files will not have this problem. Needs to be verified.

- The input impedance and return loss of the new board has not yet been measured.

3. Reports from L2 Managers

Brian Hendricks:

- Two old BPM's were added to the readout for the last 12 hours or so of the beam. These are A32 and A33.

- Working on turn by turn support. Brian needs something to test with. Luciano will work with Brian to provide this.

- Diagnostics is moving along. Luciano has made the diagnostics variables available. Some diagnostic capability is available on the W25 page. The crate diagnostics is not yet available and will be worked on in the near future.

Margaret Votava:

- Met with Vahid concerning using the BPM information in a tight feedback system for controlling some magnets near the B0 and D0 collision points. There was some discussion of how this might work, timescale, etc. It seems likely that the project will not be able to use the TeV BPM upgrade electronics but will have to invent their own system. It may require splitting the raw signals from some of the BPM's near these interaction regions.

Tim Kasza:

- Working in the service buildings F1, F3, F4, F2 and A1 to get the cables pulled back

or extended to the final rack positions.

- Stu is working on the filter board requisitions and the front panel.

Rob Kutschke:

- Rob gave a talk about the analysis of the data taken during the A3 tests. Most of his work is written up in notes 1315 and 1319 and people are encouraged to read the two notes.

3. Technical Coordinator -- Jim Steimel

- Jim is working on creating a second test stand in FCC for Graychip and Echotek studies. This work is almost complete.

- Marv Olson is coordinating an effort to hook up pbar cables to the BPMs in the tunnel.

4. AOB.

- Meeting Thursday at 1:30 to discuss timing and filter boards.

- Meeting Thursday, Sept 2 at 1:30 to discuss Graychip/Echotek.